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OPNAVINST 3721.5L
N88
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OPNAV INSTRUCTION 3721.5L

From: Chief of Naval Operations

Subj: NAVAL AIR TRAFFIC CONTROL AIR NAVIGATION AIDS AND LANDING
SYSTEMS PROGRAM

Ref: (a) NAVAIR 00-80T-114, Naval Air Training and Operating
Procedures Standardization (NATOPS) Air Traffic
Control Manual, November 2002
(b) OPNAVINST 3722.35
(c) COMNAVAIRFORINST 3025.1A (NOTAL)
(d) OPNAVINST 4790.4E
(e) COMNAVAIRFORINST 4790.2A
(f) DoD Reliability, Availability, Maintainability, and
Cost Rationale Report Manual of 1 June 2009
(g) DoD Directive 5030.19 of 15 Jun 1997
(h) CCSB-SHORE-002.00, Shore Configuration Control Sub-
Board Policy and Procedures Manual, 19 May 2004
(NOTAL)
(i) OPNAVINST 4441.13A
(j) OPNAVINST 11000.16A
(k) NWP 1-03.1, Operational Reports (NOTAL)

Encl: (1) Air Traffic Control Naval Aviation Requirements Group
(ATC NARG) Charter
(2) NAALS Operational Capability Improvement Request
(OCIR) Process, Format and Flow Chart
(3) Air Traffic Control (ATC) Systems Maintenance Ashore
(4) Procedures for the Establishment, Composition and
Operation of NAALS-Related Fleet Project Teams (FPT)

1. Purpose. To provide policy and guidance for planning, programming, budgeting, and management of Naval Air Traffic Control, Air Navigation Aids and Landing Systems (NAALS) assets under the cognizance of the Office of the Chief of Naval Operations, Director, Naval Airspace and Air Traffic Control Standards and Evaluation Agency (NAATSEA) (OPNAV (N887)). To enact standard policy and procedures for the safe, day-to-day

operation and maintenance of the Department of the Navy (DON) air traffic control (ATC) systems. This document has been revised extensively and should be read in its entirety.

2. Cancellation. OPNAVINST 3721.5K.

3. Scope. The concepts, responsibilities and procedures cited in this instruction are used to ensure fiscal resources are strategically apportioned to support the provision of safe, orderly, and expeditious ATC services and to allow for cradle to grave equipment technical and integrated logistics support. Day-to-day, routine management of these assets is accomplished through ATC and electronics maintenance organizations at the installation, ship, or expeditionary squadron level. This instruction is designed to apply to all ATC systems worldwide at all classes of Navy and Marine Corps air traffic control facilities (ATCF) ashore and afloat as defined in references (a) and (b).

a. Enclosure (1) establishes the Air Traffic Control Naval Aviation Requirements Group (ATC NARG) and governs objectives, responsibilities and actions.

b. Enclosure (2) governs the NAALS operational capability improvement request (OCIR) process.

c. Enclosure (3) prescribes on-site maintenance and support policy for shore ATC systems under the cognizance of Program Executive Officer Tactical Aircraft Programs, Program Manager, Naval Air Traffic Management Systems (PMA213).

d. Enclosure (4) establishes procedures and outlines responsibilities for NAALS related fleet project teams (FPT).

4. Background

a. The Federal Aviation Act of 1958, as reauthorized by the Federal Aviation Administration (FAA) Reauthorization Act of 1996, and Department of Transportation (DOT) Act of 1966, referred to as the Acts, authorize the FAA Administrator to provide for and to operate a common system of ATC and air navigation for civil and military aircraft within the United States, its possessions and territories. Under the acts, military agencies are responsible for developing systems,

procedures, and facilities specific to air warfare and primarily of military concern. The acts also authorize the Secretary of Transportation to delegate certain responsibilities to other Federal departments or agencies, with their consent. Further, the acts direct timely exchange of programmatic, policy and requirements information between DOT, Department of Defense (DoD) and the National Aeronautics and Space Administration. Additionally, as signatory to the Convention of International Civil Aviation, U.S. non-tactical military equipment used for air navigation and ATC should be compatible with International Civil Aviation Organization standards and recommended practices and shall meet Code of Federal Regulations and U.S. naval aviation standards.

b. Per the acts and national defense policy, the U.S. Navy is responsible for ATC services to aircraft operating from ships at sea and, under local status of forces agreements, for aircraft operating at foreign airfields covered by these agreements. By memoranda of agreement (MOA) between the FAA and the Military Services, the DON assumed responsibility for providing ATC services at certain Navy and Marine Corps airfields within the contiguous and continental United States, its territories and possessions.

c. The responsibility to provide ATC services includes the obligation to provide essential elements and resources: a management organization, staff, equipment, and a physical plant. To this end, shore naval ATC advancements in these four areas have closely paralleled developments in the civil arena. Naval ATC has been an active participant, as a developer, as a service provider, and as a partner with the FAA and industry.

d. ATC afloat has similarly evolved. Changes in operating doctrine and aviation platforms, including Joint Precision Approach and Landing System, Joint Strike Fighter and impending unmanned aircraft systems such as Navy - unmanned combat aerial system, have mandated increased ATC fiscal investments in nuclear aircraft carrier (CVN), amphibious assault ship (general purpose) (LHA) and amphibious assault ship (multipurpose) (LHD), and air capable ships.

e. Also, there is a necessity for Marine Corps expeditionary ATC to deploy quicker and with a smaller footprint than traditional systems in order to directly support the vision of Marine expeditionary battlefield and maneuver warfare.

f. Increasingly costly and complex technologies, used to satisfy operational requirements, compete for dollars throughout the budget process. The Office of the Secretary of Defense, recognizing the economic benefits of a common ATC system, stipulated an FAA and DoD joint acquisition strategy among ATC service providers, consistent with mission requirements. These realities drive a need for a structured ATC management process.

5. Policy. Defense Planning Guidance requires the DoD to support aircraft launch and recovery operations essential to the principles of forward presence and crisis response. Naval ATC, ashore and afloat, fundamentally supports these critical-to-war fighting principles, while providing safe, orderly, and expeditious service in support of naval air warfare objectives. To enact standard policy and procedures for the safe, day-to-day on-site operations, maintenance and support of DON ATC systems, an interactive approach to the NAALS program is required. To this end, it is OPNAV (N887) policy that:

a. Funding for NAALS programs and acquisitions will be determined by mission needs, operational requirements, equipment obsolescence, and the necessity to modernize non-tactical systems to maintain compatibility and interoperability with the National Airspace System (NAS).

b. An ATC NARG shall be established for the purpose of prioritizing requirements for inclusion in the Program Objective Memorandum (POM) process. Reference (c) implements the Naval Aviation Enterprise (NAE) corporate business model into the NAALS program methodology by delineating standard guidelines for the NARG process.

c. ATC systems ashore and afloat shall be managed per reference (d) to ensure an active maintenance program, preventive maintenance schedules, standardization of maintenance procedures, and documentation of accomplished maintenance actions. Evaluation of NAALS maintenance practices, to ensure adherence to optimum methods and to validate unit compliance, shall be as specified in reference (a).

d. Per reference (e), Naval Aviation Maintenance Program policy associated with repairs, inspections, and documentation are applicable to the Marine Corps expeditionary ATC systems.

e. All shore ATC maintenance activities, including in-service engineering agents (ISEA), shall report maintenance data to Space and Naval Warfare Systems Center Atlantic (SSC LANT) NAALS Configuration Data Management Team (Code 4.3.1.5.0.) via the maintenance data system (MDS). The approved process and format for tracking, recording, and reporting maintenance data shall be provided by SSC LANT on the ATC Web site at <https://atc.navy.mil/>. Reporting of ATC maintenance is required to ensure accurate total ownership cost data for ATC systems and directly contributes to lifecycle and logistics support decisions.

6. Sustainment Requirements

a. The chair of the Joint Capabilities, Integration and Development System (JCIDS) Manual defined three mandatory sustainment requirements to ensure that effective sustainment is addressed and accomplished over the life cycle for all newly developed and fielded systems. These requirements include a key performance parameter (KPP), availability; and two key system attributes, reliability and ownership cost. This paragraph will address the availability KPP.

b. Availability consists of two components: materiel availability (A_m) (fleet) and operational availability (A_o) (unit). The components provide availability percentages from a corporate, fleet-wide perspective and an operational unit level, respectively. The A_o metric is an integral step to determining the fleet readiness metric expressed by A_m . The following provides guidance for the development of both metrics for NAALS systems:

(1) A_m is a measure of the percentage of the total inventory of a system operationally capable of performing an assigned mission (ready for tasking) at a given time, based on materiel condition. This measure can be expressed mathematically as the number of operational end items divided by the total population. The A_m addresses the total population of end items planned for operational use, including those temporarily in a non-operational status once placed into service

(such as for depot-level maintenance). The total life cycle time frame, from placement into operational service through the planned end of service life, must be included. Also, A_m is computed differently for systems with system-level floats and spares, for systems without system-level floats and spares, and for multiple channel systems. Development of the A_m metric for NAALS equipment is a PMA213 responsibility.

(2) A_0 indicates the percentage of time that a system or group of systems within a unit are operationally capable of performing an assigned mission and can be expressed as (uptime/(uptime + downtime)). A_0 is the primary measure of readiness for NAALS equipment. Determining the optimum value for A_0 requires a comprehensive analysis of the system and its planned use as identified in the concept of operations, including the planned operating environment, operating tempo, reliability alternatives, maintenance approaches, and supply chain solutions.

(3) Per reference (f), a minimum acceptable baseline A_0 shall be established for naval systems and equipment and included in all statements of required or desired capabilities. The minimum acceptable A_0 for DON NAALS equipment is established by OPNAV (N887), with the exception of mobile ATC systems which are set by Headquarters Marine Corps, Aviation Expeditionary Enablers Branch, Air Traffic Control (APX-25). The established A_0 provides a realistic and achievable capability that a system will be measured against, along with defining operational resource levels. Consistent focus on A_0 will benefit resource sponsors and program managers, thus helping the sponsors balance real capabilities and total costs.

(a) For the purpose of reporting NAALS, uptime of the A_0 calculation is expressed by the numerical value mean time between downing events (MTBDE). Downing events are failures and maintenance actions (scheduled and unscheduled) that result in the NAALS system being taken offline.

(b) The downtime of the A_0 calculation is expressed as mean down time from downing events, requiring addition of the mean time to repair (MTTR) and the mean logistics delay time (MLDT). Calculating MTTR is accomplished by determining total active repair time for downing events (scheduled and unscheduled) divided by the same total number of downing events

used for MTBDE. Calculating MLDT is accomplished by determining total supply response time, total administrative delay time, and total outside assistance delay time for downing events and dividing each by the same number of downing events used for MTTR and MTBDE. For dual channel systems, each channel is calculated separately. The resulting numerical values are then summed resulting in MLDT.

1. MLDT: The average time a system is unavailable due to logistics system delays associated with the maintenance action (i.e., obtaining required parts (mean supply response time (MSRT)) or other logistics resources (mean administrative delay time (M_{AdmDT}), mean outside assistance delay time (MOADT)) and other delays) where:

2. MSRT: Is the average portion of down time awaiting receipt of a spare component (both from onboard and off ship) averaged across all maintenance actions (whether they needed parts or not). MSRT is the usually single greatest driver in MLDT.

3. M_{AdmDT} : The average period of down time awaiting logistics resources other than spare parts. It includes time awaiting qualified maintenance personnel, support equipment, technical data, training, facilities, etc. Examples are mean down time for documentation, mean down time for training, and mean down time for other reasons.

4. MOADT: The average time awaiting maintenance teams from other locations - depot repair teams and general support teams who travel to operating sites to perform maintenance are examples.

7. Responsibilities

a. The Office of the Chief of Naval Operations, Air Warfare Division (OPNAV (N88)) is the resource sponsor for research, development, test and evaluation and Other Procurement, Navy funds for DON ATC programs both ashore and afloat. OPNAV (N887), as the requirements office, has managerial and sponsorship oversight for the NAALS program. In this capacity, OPNAV (N887) shall:

(1) Set policy, validate operational requirements, and provide direction to other related offices.

(2) Coordinate with other resource sponsors and organizations, e.g., Program Executive Offices for Aircraft Carriers, Expeditionary Warfare and Tactical Aircraft Programs concerning ATC acquisition and logistics issues. For joint service or joint service interest programs, coordinate with the participating services and the DoD Policy Board on Federal Aviation (PBFA) per reference (g).

(3) Provide PMA213 with validated operational requirements to establish baselines and planning objectives for the NAALS program, documenting the Chief of Naval Operations (CNO) input to the Planning, Programming, Budgeting, and Execution (PPBE) process.

(4) Sponsor and chair the annual ATC NARG per enclosure (1).

b. Headquarters Marine Corps (APX-25) is the requirements officer for the Marine Corps Expeditionary ATC program. In this capacity, APX-25 shall:

(1) Validate operational requirements and provide direction in Marine Corps expeditionary ATC matters to other related offices.

(2) Coordinate with OPNAV (N887) and other organizations concerning ATC acquisition and logistics issues. For joint service programs and interest, coordinate with the participating services and the DoD PBFA per reference (g).

(3) Provide OPNAV (N887) with validated operational requirements.

c. PMA213 is the program management authority and has execution responsibilities for the NAALS program including life-cycle support of all ATC systems. PMA213 shall:

(1) Within the policy guidance provided and requirements established by OPNAV (N887), coordinate and direct the planning, development, procurement, installation, training and support of NAALS equipment.

(2) Within the policy guidance provided and requirements established by OPNAV (N887), establish MOAs or other appropriate mechanisms with other Navy, DoD, and non-DoD agencies to ensure the continued dedicated technical support to Navy and Marine Corps ATCFs.

(3) Effect liaison with other government agencies to ensure programs are mutually supporting and are not duplicated.

(4) Establish a configuration and inventory management plan for installed NAALS assets.

(5) Perform OCIR program management per enclosure (2).

(6) Maintain an ATC troubled systems report and identify top readiness degraders and cost drivers, using available data including casualty reports (CASREP) requisition data.

(7) Issue such instructions and establish detailed reporting procedures, configuration validation aids, reporting assistance, and contact information as necessary, to accomplish actions described above.

(8) Coordinate with Commander, Naval Air Systems Command (COMNAVAIRSYSCOM), Program Manager, Naval Aviation Training Systems (PMA205) on training requirements for new and installed equipment.

d. SSC LANT is the shore ATC systems configuration data manager and the technical manager for OPNAV (N887). Policy and procedures to manage the operation of the Shore Configuration Control Sub Board (Shore CCSB) are contained in reference (h). SSC LANT shall support and coordinate all matters pertaining to the shore NAALS program, to include maintaining a comprehensive database for shore NAALS equipment and physical plants to serve as a baseline for management decisions. This database can be accessed from the ATC Web site. Accurate configuration data is critical to support onboard supply allowancing, test equipment support, and modernization programs. Reference (i) provides policy guidance for coordinated shore based allowance lists.

e. ISEA. The designated ISEA for a particular NAALS system is responsible for the execution of the life-cycle plan as

directed by PMA213. They shall establish certification criteria for fielded equipment, operational performance parameters, planned and preventive maintenance requirements, maintenance intervals, and conditions when equipment shall be removed from service for repair. Their responsibilities fall under the following functional areas and elements:

- (1) Maintenance management,
- (2) System performance evaluation and maintenance engineering,
- (3) Maintenance documentation support,
- (4) Assist PMA213 in configuration management,
- (5) Depot level repair support, and
- (6) Maintenance support, including development of job qualification requirements (JQR) for systems under their cognizance requiring flight inspections.

f. Major Claimants and Echelon 2 Commands shall:

- (1) Prepare and submit POM exhibits to support the required maintenance and safe operation of NAALS equipment.
- (2) Coordinate with OPNAV (N887) and APX-25 and with other organizations concerning ATC resources to maintain and operate NAALS equipment.
- (3) Process OCIRs per enclosure (2).
- (4) Where designated as a member of the Executive Steering Committee (ESC) per this instruction, submit at the annual ATC NARG prioritized NAALS equipment requirements for inclusion in the Future Years Defense Plan (FYDP).
- (5) When acting on installation facilities planning proposals, major claimants and echelon 2 commands responsible for shore installation management shall coordinate with NAE if NAALS equipment alteration, replacement, removal or installation is anticipated to be necessary.

g. Commander, Naval Air Forces; Commander, Naval Surface Forces; Commander, Navy Installations Command (CNIC); and Marine Corps Installations Staffs. These staffs shall:

(1) When designated by OPNAV (N887), conduct on-site ATC Naval Air Training and Operating Procedures Standardization (NATOPS) program evaluations, per reference (a), to evaluate operational readiness, system adequacies, condition of NAALS equipment, operator and technician staffing and training, and general status of ATCFs and associated electronic maintenance divisions. These ATC NATOPS evaluations serve to pinpoint safety, service, and equipment deficiencies and can form the basis for OCIRs.

(2) For commands under their cognizance, these staffs shall:

(a) Develop an integrated priority list for NAALS installations and upgrades in conjunction with OPNAV (N887), APX-25 and CNIC, Air Operations (N32).

(b) Prepare and submit POM exhibits to support the required maintenance and safe operation of NAALS equipment.

(c) Coordinate NAALS program requirements with commanding officers with an assigned ATC mission.

(d) Where designated as members of the ESC per this instruction, submit at the annual ATC NARG prioritized NAALS equipment requirements for inclusion in the FYDP.

(e) Monitor application of the policies and principles of the NAALS program.

(f) Evaluate and endorse OCIRs and assign priorities to ensure mission requirements are supported, per enclosure (2).

(g) Designate a staff member with the primary task of guiding and coordinating NAALS maintenance.

(h) Monitor compliance with the reporting requirements established by reference (d) and PMA213.

(i) Review and comment on military construction (MILCON) projects having potential impact on ATC, landing systems, navigational aids, and the training and readiness of flying units.

(j) Review and endorse base electronic systems engineering plans (BESEP) for proposed equipment installations to identify potential budgetary impacts and to ensure NAALS planning support and technical coordination requirements are met.

(k) Monitor system performance and maintenance data reporting to MDS.

(l) Monitor compliance with NAALS equipment configuration management.

(3) Issue such instructions and establish reporting procedures necessary to accomplish actions described above.

h. Commanding Officers

(1) Commanding officers with an assigned ATC mission are the primary source of data for NAALS effectiveness. Therefore, commanding officers shall continuously review the operational capabilities of installed NAALS assets. These commanding officers shall:

(a) Familiarize themselves with the NAALS program and implement the concepts set forth herein.

(b) Continuously review the operational capabilities of installed NAALS assets, coordinating closely with respective chain of command.

(c) Forward proposed requirements to OPNAV (N887) for ATC requirement validation using OCIR submission procedures described in enclosure (2).

(d) Request disposition instructions for NAALS assets in excess of mission requirements from PMA213, via the chain of command.

(e) For shore installations:

1. Ensure assigned electronic maintenance division complies with the maintenance policy contained in enclosure (3).

2. Ensure the installation frequency manager is aware of the need to safeguard ATC and NAALS frequencies so as not to interfere with communications with aircraft and airfield vehicular traffic or the control and operation of airfield equipment.

3. Ensure the ATC facility officer (ATCFO), the Navy ground electronics maintenance officer (GEMO), and the Marine Corps ATC maintenance officer (ATCMO) are included as members of the Command Master Planning Board to ensure projects do not negatively impact ATC procedures or the operation of landing systems or navigational aids, per reference (j).

4. Review and endorse BESEPs to identify potential budgetary impacts and to ensure NAALS planning support and technical coordination requirements are met.

(f) Maintain and review configuration, new processes, and ownership cost reporting procedures.

(g) Transmit CASREPs for NAALS equipment per references (a) and (k).

(2) Commanding officers of aviation flying units shall:

(a) Identify and evaluate capability gaps of NAALS assets which negatively impact unit operational readiness.

(b) Submit capability improvement requirements to OPNAV (N887) using OCIR submission procedures described in enclosure (2).

8. Records Management. Records created as a result of this instruction, regardless of media and format, shall be managed per Secretary of the Navy Manual 5210.1 of November 2007.

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9. Reports Control. Report Control Symbol OPNAV 3721-11 has been assigned to the Naval Operational Capability Improvement Request (enclosure (2)) per SECNAV Manual 5214.1 of December 2005.



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AIR TRAFFIC CONTROL NAVAL AVIATION REQUIREMENTS GROUP (ATC NARG)
CHARTER

1. Purpose. The ATC NARG shall meet annually for the purpose of recommending program priorities for inclusion in the PPBE process. The work of this group is a major source of input to OPNAV (N887), PMA213, and claimants towards the development of unified goals, and the prioritization of requirements for the POM process. Reference (c) delineates standardized guidelines for NARG execution and generation of a consolidated requirements priority list. The ATC NARG is a forum for direct fleet interface with the program sponsor, requirements officer, program manager and ISEAs. The primary goals of the ATC NARG are to receive feedback from fleet equipment users, jointly establish priorities for future efforts, develop solutions to reliability and maintainability problems, and provide updates concerning ongoing efforts. The ATC NARG is characterized by a focus that is broad in scope and specific in its recommendations and will be the principal source of program priority assignment. One of the objectives of the ATC NARG is to provide more efficient tracking and response to NAALS requirements and alternatives, while reducing the burden on the OPNAV staff, by thoroughly exploring considerations such as desirability or capability versus affordability and providing more timely and responsive interface with the fleet.

2. Organization

a. The ATC ESC is responsible for prioritizing ongoing and future efforts for inclusion in the PPBE process. The ESC will also establish ATC NARG action items, assigning action officers and due dates as well as clarifying desired results. The ESC has the discretion to add or delete membership of the NARG.

(1) Director, NAATSEA (OPNAV (N887)) shall chair the ESC.

(2) Voting members of the ESC are:

(a) APX-25

(b) Commander, Naval Air Forces, Air Traffic Control Training and Readiness Office (N74)

(c) CNIC (N32)

(d) Commanding General, Marine Corps Installations Command, Training and Readiness Office (G3)

(e) Commander, Naval Surface Forces, Aviation (N42)

(f) Commanding Officer, Naval Air Technical Training Center (30)

b. Many of the voting member organizations have multiple training and readiness offices which participate in the ATC NARG; however, only one office may serve as the voting member on the ESC. It is the responsibility of these organizations to designate their voting member. Additional ATC NARG participants include OPNAV (N887) staff members, APX-25 staff members, PMA213 staff members, including deputy program managers and integrated product team members (at the discretion of the program manager), PMA205 staff members, Naval Air Warfare Center, Aircraft Division (NAWCAD) and Space and Naval Warfare Systems Command systems center fleet liaisons, and ATC ISEA division and branch heads.

c. In order to maintain continuous and effective communications with NAALS fleet users and liaisons, OPNAV (N887) may use various working committees, such as the ATC Supportability Review; ATC Leadership Continuum; ATC Proficiency Trainer and or "A" School Trainer Management Teams; and DoD and FAA Special Use Airspace Councils, to support the NARG by assisting in exploring options that enhance ATC service, maximize equipment performance and reduce lifecycle costs; and in providing advice concerning POM priorities. OPNAV (N887) may establish other working committees to address issues and needs in a specific functional topic area as needed. Chairs, attendance, agendas, and reporting requirements for such working committees shall be assigned by the ESC.

3. Agenda. Fleet input will drive the specifics of the ATC NARG agenda. Calls for agenda items shall be issued by the chair with sufficient lead time to allow for receipt, review, and preparation of a formal agenda distributed not later than 15 working days in advance of the meeting. However, the following topics will normally be included:

- a. Review of action items, including formal updates by action officers.
- b. Review of previous 3 years of ATC NARG priorities to ensure year-to-year consistency.
- c. Fleet issues and priorities presentations.
- d. Deputy program manager presentations.
- e. ISEA presentations.
- f. Summary of action items from most recent ATC Supportability Review.
- g. Establishment of new action items by ESC chair.
- h. ESC deliberation and establishment of current year's POM issues priority list.

NAALS OPERATIONAL CAPABILITY IMPROVEMENT REQUEST (OCIR)
PROCESS, FORMAT AND FLOW CHART

1. Purpose. The NAALS OCIR shall be used for the purpose of initiating a new global NAALS requirement, identifying and satisfying a command specific requirement, or to request replacement of onboard equipment. The OCIR process is only valid when used to request items related to ATC. Simply stated, the cognizance of OPNAV (N887) is restricted to those items procured with funds obtained by OPNAV (N887) through the budget process. The equipment best described generically would include: air traffic systems, landing systems, and ATC-related training systems.

a. This equipment must directly support air traffic services and would include such items as air-ground radio communication used by controllers to communicate with pilots, but shall not include squadron radios. Relocating ATC equipment from its original location is not funded by OPNAV (N887) unless the requirement for such a move is generated by OPNAV (N887). ATC equipment relocation costs, necessitated by a MILCON project or special project, should be included in the MILCON project submittal (DD Form 1391 FY ____ Military Construction Project Data). Advanced planning with the immediate superior in command (ISIC) should clarify any misunderstanding regarding these issues.

b. OPNAV (N887) ensures the viability of the OCIR process, and supports NAALS requirements in the POM process using the OCIRs as a principal input vehicle in addition to the ATC NARG priority listing.

2. Background. The OCIR was introduced as a mechanism for operational elements to formally state their requirements as a function of their mission. The ATCF is in the best position to reconcile their existing equipment and physical plant with their operational requirements and any projected change in these requirements. Procedures for evaluating and satisfying OCIRs have evolved and now constitute a major input to the POM process and COMVAIRSYSCOM budget activities.

3. Submission Process. The following is a descriptive explanation of the OCIR process from initiation to disposition:

a. Local Commanders. Any command or activity with an operational or emerging need for air traffic services may submit a NAALS OCIR. Local commanders should be particularly alert to the early identification of changing missions that require the provision of new or expanded air traffic services. If it is determined that existing NAALS equipment is inadequate to support the mission at a Navy or Marine Corps air station, onboard a CVN, LH, LHD, or Marine ATC detachment, an OCIR shall be initiated to ensure adequate lead time for programming and budgeting the resources to meet the new requirements.

(1) If initiated by a station, ship, or ATC squadron or detachment, the OCIR shall be jointly coordinated by the ATCFO and GEMO or ATCMO ensuring operational, maintenance, and manpower aspects are addressed in the submission.

(2) If initiated by a flying unit, the OCIR shall include initial endorsements by the host command and its ISIC to ensure host station, ship and detachment Operations and Maintenance funding and manpower aspects are considered. The OCIR should be descriptive of the ATC requirement, as it is restricted to those items which can be procured with funds obtained by OPNAV (N887) through the budget process.

(3) The OCIR (using the format in paragraph 5 below) shall be an enclosure to a commanding officer cover letter and sent via the chain of command to OPNAV (N887), with information copy to PMA213. For Marine Corps commands, APX-25 shall be the last "via addressee" just prior to OPNAV (N887). To facilitate OCIR processing and tracking, only one OCIR shall be submitted per cover letter.

(4) Liaison with senior ATC community representatives within the host command chain of command should be conducted in advance of formal submission to facilitate understanding and subsequent endorsement of the OCIR.

(5) In order to preclude any premature, unapproved action on such requests, chain of command endorsement and OPNAV (N887) approval are necessary before such requests are provided to any agencies outside the chain of command.

b. Chain of Command shall review OCIRs for appropriateness, fiscal responsibilities and impact upon their assigned missions and tasks. Specifically, they shall:

(1) Screen OCIRs to ensure they reflect mission requirements.

(2) Research potential applicability of the OCIR to other ATC activities under their command and consolidate requirements in their endorsement.

(3) Prioritize and forward OCIRs that are deemed appropriate.

Note: If implementation of the OCIR requires new resources (additional manpower requirements or other resources not normally provided or funded through COMNAVAIRSYSCOM), each echelon in the chain of command by favorable endorsement, is committing their command to fund these resources.

(4) Disapprove and return as canceled OCIRs that are deemed inappropriate.

Note: Any addressee in the chain of command can disapprove and return the OCIR to the originator because a valid requirement does not exist, requisite or essential resources cannot be provided, or the requested capability is not in direct support of ATC.

c. OPNAV (N887) is the final authority for the validation of requested capabilities and approval of NAALS OCIRs. This office shall review OCIRs for conformance with existing policy. Upon receipt of an OCIR, OPNAV (N887) shall:

(1) Determine if the requested capability is under the cognizance of OPNAV (N887).

(2) If under its cognizance, validate the requested capability and approve the OCIR, or if the requested capability is not a valid requirement disapprove the OCIR. Regardless of the final disposition, OPNAV (N887) shall advise the originator and all endorsing commands of disposition or status, providing a copy to PMA213.

(a) If the requested capability is validated and funding is available in a current program to support it, the requesting command will be notified in writing that the requested capability is validated and OCIR approved with information copies to all endorsing commands and PMA213. The requested capability will be provided on a prioritized basis as determined by OPNAV (N887) and PMA213 in consultation with the ATC NARG ESC.

(b) If the requested capability is validated and funding is not available in a current program or a current program does not exist to support it, the requesting command will be notified in writing that the requested capability is validated and OCIR approved with information copies to all endorsing commands and PMA213. OPNAV (N887) will task PMA213 to perform cost analysis and programming action. If the capability is not affordable within existing or planned resources, it is placed on the next POM cycle. Funding of the request will be commensurate with its relative priority.

(3) If not under its cognizance, re-address the OCIR to the organization with cognizance over the requested capability with copies to the OCIR originator, all endorsing commands and PMA213. Examples include requests for weather sensors, squadron radios, etc.

d. PMA213 shall perform overall program management of the OCIRs. In exercising these responsibilities, they shall:

(1) Plan and budget as necessary to satisfy approved OCIRs.

(2) Upon request of OPNAV (N887), perform a cost analysis or program action on any approved OCIR.

(3) Maintain an OCIR tracking system and provide working status on the ATC Web site. OCIRs shall not be added to the tracking database until in an approved status.

(4) Upon request of OPNAV (N887), provide a number for assignment to approved OCIRs. OCIR numbers shall use a seven digit tracking number. OCIRs are to be numbered with a four

digit prefix reflecting the calendar year followed by a three digit suffix assigned in the order received (i.e., the first OCIR received in 2012 would be numbered 2012-001).

4. Tracking and Status Terminology. NAALS OCIRs shall be tracked using the following terminology:

a. Approved: The OCIR is under the cognizance of OPNAV (N887) and has been prioritized under a current program; or OPNAV (N887) has determined a valid operational requirement exists and PMA213 has been tasked to perform cost analysis and programming action.

b. Disapproved: Requested capability is not a valid requirement as determined by OPNAV (N887) and the OCIR disapproved.

c. Closed: OCIR does not fall under the cognizance of OPNAV (N887) and has been re-addressed to the organization with cognizance over the requested capability. The originating command is responsible for follow-up coordination and tracking with the cognizant organization.

d. Canceled: An approved OCIR has been rescinded by any command that previously endorsed the OCIR, or an approved OCIR has been canceled by OPNAV (N887). Requests for cancellation of an approved OCIR by the originator shall receive concurrence of all endorsing commands.

e. Funded: Funding has been identified to complete an approved OCIR.

f. Completed: The capability has been satisfactorily provided.

5. Format. The following format shall be used (see ATC Web site for examples):

NAALS OPERATIONAL CAPABILITY IMPROVEMENT REQUEST (OCIR)

Preparing Activity:

Subject:

I. DEFICIENCY

Describe the existing deficiency that limits or derogates the operational capability to support the mission and tasks assigned the parent aviation activity. Justify the requirement in terms of mission and description of how mission is compromised by failure to meet the requirement. While manpower deficiencies may be included for information purposes, requests for manpower adjustments shall be submitted under the guidance contained in Navy and Marine Corps total force manpower policies.

II. REQUIRED OPERATIONAL CAPABILITY

Describe the required operational capability in sufficient detail to clearly define the capability needed to alleviate the deficiency discussed in paragraph I.

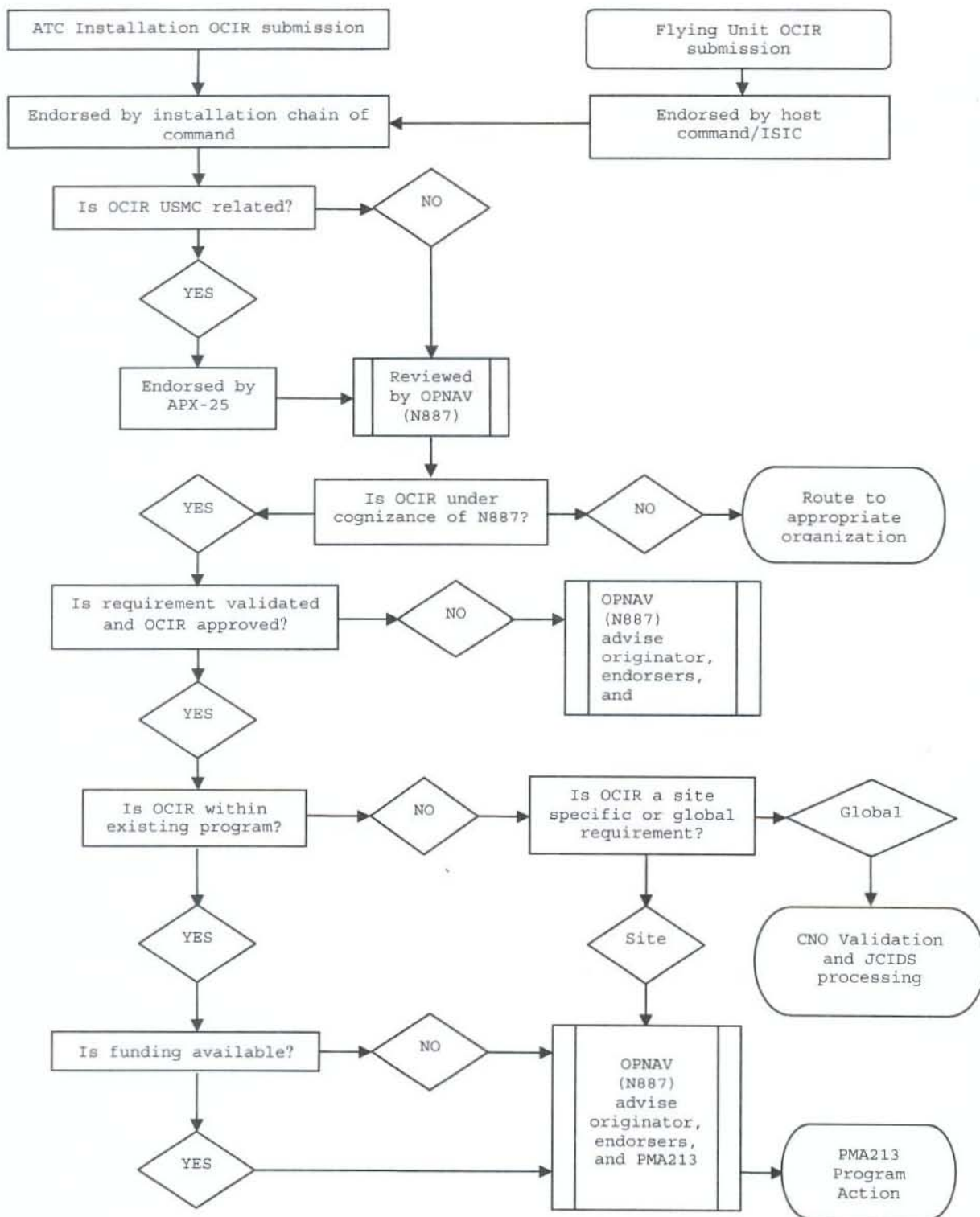
III. SOLUTIONS

Describe known or proposed solutions to the operational problem stated in paragraphs I and II; however, do not request specific equipment when establishing a new requirement. Include solutions that require changes in operational procedures to satisfactorily resolve the deficiency presented in paragraph I. Include a statement of impact on manpower (quantity, skills, etc.) and a quantitative statement of impact on operations, safety, or efficiency for each solution described.

IV. RELATIVE PRIORITY

Indicate the relative priority of this OCIR to others submitted previously but which remain unsatisfied.

NAALS OCIR PROCESSING



AIR TRAFFIC CONTROL (ATC) SYSTEMS MAINTENANCE ASHORE

1. Purpose. To enact standard policy and procedures for the safe, day-to-day, on-site operation, maintenance, and support of DON shore ATC systems.

2. Responsibilities

a. Installation Commanding Officer (ICO)

(1) Designate the installation's GEMO Navy or ATCMO Marine Corps in writing.

(2) Ensure the GEMO or ATCMO is assigned and an active member of local and regional planning boards whose actions may affect the operation and signal coverage of NAALS equipment.

(3) Ensure the GEMO or ATCMO is in the direct chain of command for all NAALS maintenance personnel.

b. GEMO Navy and ATCMO Marine Corps

(1) Responsible to the ICO via the chain of command for upkeep and timely repair of NAALS equipment to ensure continuous safe air operations in support of the installation's mission.

(a) Ensure NAALS equipment is maintained to ground inspection and maintenance requirement card (MRC) tolerances.

(b) Maintain a maintenance plan, to include equipment maintenance and calibration, which minimizes impact on aviation operations.

(c) Remove from service and repair equipment that does not meet ground inspection and MRC tolerances. After repair, ensure equipment is successfully flight inspected prior to return to service, if required.

(d) When necessary, develop locally-generated maintenance documentation per NAVSEAINST 4790.8B, Ships' Maintenance and Material Management (3M) Manual.

(e) Ensure preventive maintenance and periodic load and no-load operation of auxiliary power sources of NAALS equipment to support maximum continuity of ATC services.

(2) Maintain an ATCF electronics manual that describes the organization and processes used to maintain and repair NAALS equipment. Minimum requirements for this manual are outlined in attachment 1 of this enclosure.

(3) Maintain a technical library as outlined in attachment 1 of this enclosure.

(4) To prevent unplanned costs or system performance impacts, coordinate with the ATCFO, resident officer in charge of construction, ISEAs, and ISIC to ensure that installation projects (i.e., MILCON, relocation of navigational aids, and road construction projects) address the operational impacts and specifically identify and if necessary include relocation cost of existing equipment.

(5) When managing contracted maintenance organizations, ensure extensive knowledge of contract provisions to properly administer the technical requirements of the contract under the guidance of the contracting officer. Ensure contracts involving the maintenance of NAALS systems include, at a minimum, reference (a) and this directive as references.

(6) Submit all shore electronic systems configuration data directly to the command site profile on the ATC Web site, and validate biennially or as directed by SSC LANT. Changes to the SSC LANT database will initiate appropriate changes to the Ship Configuration and Logistics Support Information System (SCLISIS) and the Weapons System File.

(7) As a safety of flight issue, effect NAALS equipment configuration changes or modifications per the PMA213 Configuration Management Plan. ATC system configuration changes are not authorized locally and shall be coordinated with the ISIC and approved and implemented through the PMA213 configuration management process. The maintenance officer shall notify SSC LANT of any proposed changes to ATC operations and maintenance spaces (including administrative or facility systems changes such as installation and relocation of computer network systems, telephone systems, power and air conditioning systems,

etc.) to determine if an update to the station's ATC facility drawing package (FDP) is required. If changes are determined necessary, SSC LANT will update the configuration controlled version of the FDP and send a revision of the affected drawings to the station for incorporation into the local copy of the FDP.

(8) When NAALS equipment is considered "in excess", request disposition instructions from PMA213, via the chain of command.

(9) Submit NAALS shore equipment hardware, software and documentation change proposals per reference (h) for review and disposition by the Shore CCSB.

(10) Submit, per references (a) and (k), CASREPs in a timely manner with sufficient descriptive information to obtain necessary logistics and technical assistance. Supplemental guidance for drafting and submitting CASREPs for shore ATC systems can be found on the ATC Web site.

(11) Coordinate radio frequency (RF) spectrum use per OPNAVINST 2400.20F, Electromagnetic Environmental Effects and Spectrum Supportability Policy and Procedures. Coordinate with local and regional frequency coordinators to ensure that no RF emissions are permitted on or around NAALS equipment that may interfere with the frequencies used to communicate with aircraft and airfield vehicular traffic or the control and operation of airfield equipment.

(12) Ensure the proper allowance of test equipment is maintained and in calibration. Coordinate all issues related to NAALS test equipment with SSC LANT (Code 4.3.1.5.0).

(13) Due to the safety of flight implications, establish and maintain an extensive and well-documented training and qualification program for NAALS technicians.

(a) Use the 3-M personnel qualification standards to ensure that all ATC maintenance technicians are appropriately qualified to their level of maintenance or management responsibilities.

(b) In order to support effective maintenance, training plans shall include in-rate and military occupational

specialty technical knowledge, local equipment configuration, airfield safety, electronic safety, and cardiopulmonary resuscitation qualification by all personnel working on or around NAALS systems.

(c) Training records shall be maintained for individual technicians to ensure formal and local training requirements are met, along with well-documented qualifications to support the Ground Inspection Program. For those technicians performing ground inspections, training records must document completion of the minimum qualification requirements as defined in table 1.

(14) To enhance technician proficiency and the resultant positive impact on safety of flight, assign ATC maintenance technicians to ATC maintenance billets whenever possible. ATC maintenance technicians should not normally be assigned extended duties outside their professional specialty. Outside assignments should be limited to essential military duties.

3. Equipment Certification. The individual ISEAs are responsible for the installation, technical inspection, testing, and installation certification for ATC systems under their cognizance. The System Operational Verification Test (SOVT) is the formal document used to test and document that the installed system and equipment is fully operational and certified as meeting performance specifications, standards and tolerances. The performance data obtained during the installation and commissioning process, form baseline performance standards for that geographic location, to which future performance measurements are compared to detect deterioration of performance and for long-term trend analysis. ISEAs shall provide baseline performance standards to the maintenance officer as a part of the certification and acceptance process for ATC systems. The maintenance officer shall ensure the equipment is maintained within those performance standards and tolerances using the Ground Inspection Program. ATC systems shall not be operated outside the baseline performance standards and tolerances without explicit authority from OPNAV (N887).

4. Equipment Ground Inspection. Per FAA Order 6000.6B, Interagency Ground Inspection Guidance, OPNAV (N887) is accountable for ground inspection and ensuring that ATC systems are maintained and managed in a manner that assures continual

compliance with flight inspection tolerances. The FAA is responsible for flight inspections in this process; however, each electronic maintenance division is responsible for ensuring that their systems and equipment are maintained and managed by established procedures, manuals, applicable technical orders, instruction books, and or other directives and agreements that permit a facility's use in the NAS. Equipment that is operated outside the NAS shall be maintained following the same procedures.

a. Ground inspection is an ongoing process of verifying that systems are operating within the performance standards established by the ISEA. To ensure stations perform this verification responsibility in a standardized manner, ISEAs establish maintenance procedures via MRCs per NAVSEAINST 4790.8B.

(1) MRCs specifically for ground inspection shall identify the performance standards and tolerances the ATC system must operate within. These MRCs shall state that "ATC systems not operating within the identified performance standards and tolerances will be removed from service until repaired." ATC systems do not necessarily lose their installation certification while removed from service for repair. If required by FAA Order 8200.1C, United States Standard Flight Inspection Manual, the maintenance officer shall ensure that repaired equipment successfully passes a special flight inspection prior to returning to service.

(2) MRCs that check tolerances for ground inspection shall be clearly identified. The ISEA shall provide equipment performance standards associated with these MRCs to record verification of system performance for ground inspection history. Completed equipment performance standards shall be maintained on file for a period of not less than 2 years and are a critical element of the biennial ATC NATOPS evaluation required by reference (a). Materials for documenting ground inspection are located on the ATC Web site.

b. Ground inspection shall be performed only by qualified technicians with documented evidence of their capability to verify that a system is operating within baseline performance standards and tolerances. The maintenance officer is the qualification approval authority and shall designate ATC systems maintenance technicians in writing as qualified to perform

ground inspection and maintenance for each particular system. Materials for documenting and maintaining qualification are available on the ATC Web site.

(1) For systems requiring a flight inspection, qualification is accomplished through completion of formal training or ISEA-approved JQR, and oral board and or written exam. JQRs are considered as the minimum qualification requirements and may be expounded upon by the maintenance officer.

(2) For systems not requiring a flight inspection, qualification is accomplished through formal training or on-the-job training (OJT), and oral board and or written exam administered by the maintenance officer.

Note: Formal training is considered a military course of instruction, FAA Academy course, factory training or approved computer-based instruction.

(3) Oral boards shall be comprised of technicians qualified on that equipment.

(4) Technicians shall not retain their qualification(s) from one ATCF to another. The maintenance officer may authorize an abridged qualification package, which must include a JQR and an oral board and or written exam, for those technicians with previous equipment experience.

(5) Maintenance officers may cross-qualify a technician on secondary systems once the technician has demonstrated the required knowledge and experience through OJT and JQRs and successfully completes an oral board and or written exam.

(6) Technicians shall receive a qualification review at least once every 4 years or as deemed necessary by the maintenance officer. The review shall be documented in the technician's training record. The review may include a written exam and shall include an interview to assess technical knowledge and understanding of station-unique ATC system configurations.

(7) Where there is need for suspension or re-qualification of technicians, maintenance officers shall take

appropriate action locally. When contract technicians receive a suspension of qualification, the maintenance officer shall ensure contract management is proactive with immediate personnel replacement to comply with contract requirements for qualified personnel to fulfill maintenance and ground inspection requirements.

(8) The Technician Qualification Matrix, table 1, provides the qualifications that shall be achieved for military, civil service, and contract personnel. Where there are 5 or more years of documented experience on repairing and maintaining ATC systems, the formal training requirement may be waived by the maintenance officer, but only after extensive knowledge demonstration.

Table 1

Technician Qualification Matrix

EXPERIENCE	REQUIREMENT					
	Formal Training	OJT/JQR	Abridged OJT/JQR	Oral or Written Exam	Qualification Letter	Qualification Review
Initial Qualification; No Experience	X	X		X	X	X
Secondary System Qualification		X		X	X	X
Qualification with documented extensive experience			X	X	X	X
Transfer to new ATCF with extensive experience			X	X	X	X
X = Required Action						

ATTACHMENT 1

ATCF ELECTRONICS MANUAL AND TECHNICAL LIBRARY

1. The maintenance officer shall maintain an ATCF electronics manual. This is a compilation of local instructions, standard operating procedures (SOP), and information pertaining to the maintenance organization and its personnel. The following shall be contained in the manual:

a. Description of mission and organization structure to support requirements of reference (a).

b. Description of billets with minimum training qualification standards.

c. Commissioning flight inspection reports, the most recent flight inspection reports, and magnetic offset (variation) information.

d. Files and schedule of infrequent tasks that may or may not occur on a regular basis but have compliance requirements and advance planning. Some of the tasks are, but are not limited to, hazards of electromagnetic radiation to ordnance, electromagnetic radiation hazards, and safety.

e. SOPs that describe the ATC systems trouble call process including points of contact, response actions, and documentation of corrective actions.

f. SOPs for day-to-day operation of the ATC systems maintenance organization, including daily checks, performed in conjunction with ATC personnel if required, to verify proper operation of systems prior to opening the airfield each day. This SOP shall require ATC personnel to log systems into and out of service to ensure the sequence of events regarding system availability and system performance is documented.

g. SOPs for emergency procedures relating to aircraft mishaps and incidents, bomb threats, terrorist activity, catastrophic site failures, etc.

h. SOPs that delineate onboard technician requirements to support flight operations required by reference (a), and a

recall by system qualification to restore equipment casualties to normal operation. Contact information shall be included where needed to isolate problems with equipment not directly maintained by the ATC systems maintenance organization, but affects airfield operations, i.e., landline or phone circuits that interconnect systems.

i. Memorandums of understanding or MOAs that affect the maintenance and support of ATC systems.

2. The maintenance officer shall maintain a technical library, which shall include:

a. Current technical manuals for each installed system.

b. Current as-built drawings of all ATC systems.

c. Interfacility and intrafacility landline connectivity including connectivity diagram, labeled demarcation points, designation labels on each circuit, maintenance responsibility information, and telecommunications service request and telecommunications service order records to support connectivity requirements.

d. Historical files documenting equipment acceptance, upgrades, removals, transfers, Defense Re-Utilization and Marketing Office (DRMO) disposition, and shipment.

e. Files that document current and planned installations with BESEPs for those systems.

f. Current test equipment allowance process report.

g. Access to current instructions and publications relating to ATC systems. The recommended list along with Internet links to some of the applicable instructions and references is located on the ATC Web site.

PROCEDURES FOR THE ESTABLISHMENT, COMPOSITION AND OPERATION OF
NAALS-RELATED FLEET PROJECT TEAMS (FPT)

1. Purpose. To establish procedures and outline responsibilities for FPT members participating in the development, acceptance (testing), and lifecycle configuration and modification of NAALS equipment.

2. Discussion. The complexity, expense, and extensive planning associated with the introduction or modification of NAALS systems necessitates close coordination and communication between user activities, systems commands program offices, ISEAs, and government contractors to ensure fleet requirements are fully satisfied. The validation and satisfaction of fleet NAALS equipment requirements and capabilities are best accomplished by actively involving subject matter experts from the fleet as part of an FPT during the development, acquisition and acceptance (testing) of all newly designed or modified NAALS equipment.

3. Action

a. OPNAV (N887), with input from ATC training and readiness (T&R) offices and ISEAs, will determine the makeup of the FPT (including the required number of personnel, alternates, rates and practical experience). ATC T&R offices will be responsible for screening nominees to determine suitability.

b. The ISEA lead fleet liaison, or designated representative, will coordinate all FPT activities (i.e., meetings and communications, travel, correspondence, etc.).

c. FPT members will be appointed in writing by OPNAV (N887) with copies to the ISEA lead fleet liaison and the appropriate ATC T&R office. The FPT will actively participate in the development, acquisition, acceptance (testing) and validation of newly designed or modified ATC equipment.

d. Every effort shall be made to ensure personnel assigned to the FPT are capable of following the equipment from initial development through initial operational capability.

e. If reassignment of an FPT member becomes necessary, a replacement shall be designated in writing and briefed on all past and planned proceedings.

f. FPT training will be conducted by the ISEA lead fleet liaison. Training will cover chain of command, site preparation and guidelines concerning ethics and proper procedures.

4. FPT Functions and Duties

a. Functions

(1) Review, inspect, and test the system as requested by OPNAV (N887), PMA213, and appropriate ISEA. Assist in validating system capabilities and ensuring the end product satisfies mission and user requirements.

(2) Assist the ISEA in developing the training system functional description required for new training device acquisition applicable instructions.

b. Duties

(1) NAWCAD Lead Fleet Liaison

(a) Coordinate all FPT travel, meetings, and correspondence with the ISEA, via the respective ATC T&R office when appropriate.

(b) Maintain a correspondence file to track the developments chronologically throughout the procurement of the device.

(c) Inform OPNAV (N887) of any changes in operational procedures, program changes or operating environment that may affect system capabilities, via the ISEA and the ATC T&R office.

(d) Receive, evaluate, and relay to the ISEA, via the ATC T&R office, recommendations from operational units on specific problem areas that could adversely affect system performance or operation.

(e) Keep OPNAV (N887), PMA213 and the ISEA informed of FPT issues and project status.

(f) Submit all comments and or recommendations that could affect scope of work to OPNAV (N887) via the ISEA and the

ATC T&R office. (Note: Only PMA213, with OPNAV (N887) concurrence, has the authority to implement contractual action which affects cost, schedule or performance.)

(2) FPT Members

(a) Attend and actively participate in all appropriate conferences, reviews and meetings.

(b) Provide operational data (unclassified) to the ISEA, as required.

(c) Notify NAWCAD lead fleet liaison of any and all communications with other government agencies and or government contractors.

(d) Review system related documentation (i.e., specifications, logistic support documents, training evaluation plan, testing procedures, hardware configuration and equipment facilities requirements).